

What is claimed is:

5 1. An apparatus for reducing power consumption of a LCD(Liquid Crystal Display) backlight lamp, comprising:

a power unit for supplying power;

a control unit being supplied power from the power unit and outputting a brightness control information signal having a plurality of discrete incremental level values corresponding to discrete brightness levels;

10 an inverter unit receiving the brightness control information signal from the control unit and outputting driving power of a corresponding level in accordance therewith, for driving a backlight lamp by levels; and

a backlight lamp receiving the power from the inverter unit .

15 2. The apparatus of claim 1, further comprising;

a memory unit storing a control information for adjusting a brightness of a LCD screen

20 3. The apparatus of claim 1, further comprising:

a key input unit for adjusting a brightness of a LCD screen.

4. The apparatus of claim 1, wherein the control unit includes:

a keyboard controller discriminating a key press state by a user and outputting a brightness adjustment key input signal;

25 a microprocessor receiving the brightness adjustment key input signal and selecting a kind of brightness adjustment information and brightness ROM table,

and outputting the brightness control information;

a brightness adjustment information outputting unit outputting a brightness adjustment information signal to the inverter unit according to the brightness control information inputted from the microprocessor.

5

5. The apparatus of claim 4, wherein the microprocessor controls the brightness adjustment information signal linearly or nonlinearly so as to be similar to a brightness increase curve by composing the brightness ROM table according to the luminescent characteristics of the backlight lamp.

10

6. The apparatus of claim 4, wherein the brightness adjustment information outputting unit outputs a digital brightness adjustment information signal converted into information required for the brightness adjustment to the inverter unit.

15

7. The apparatus of claim 6, wherein the digital brightness adjustment information signal uses a voltage level of a D/A port, a PWM duty cycle signal or a SM BUS (System Management Bus) signal.

20

8. The apparatus of claim 2, wherein the memory unit includes a memory unit storing brightness information of a last brightness level inputted from the control unit and an incremental brightness variation value setting unit for outputting a preset brightness value by incremental level to the control unit.

25

9. The apparatus of claim 8, wherein the variation value setting unit

sets a brightness variation quantity by incremental level or a variation time by incremental level according to an input by a user.

10. The apparatus of claim 1, wherein the power unit uses a power
5 adapter or a battery as a power source and is constructed with a power discrimination unit for discriminating between the power sources.

11. A method for saving power of a LCD backlight lamp, comprising:
outputting a brightness control signal to an inverter corresponding to a
10 brightness information value, wherein the brightness information value gradually increases over a certain time period in consideration of luminescent characteristics of a backlight lamp; and

outputting a constant brightness control signal corresponding to the
brightness information value after the gradually increased brightness information
15 value reaches a preset value.

PM
CML

00072876 101001
T00T0T 9282660

add
A1